

REMARKS

The Examiner is thanked for the examination of the application. In view of the foregoing amendments and the remarks that follow, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Claims 1 – 3, 5 – 7, and 9 have been rejected under 35 USC 103(a) as being unpatentable over USP 6,959,112, herein after *Wagman*.

In order to distinguish the present invention from the cited references, U.S. Patent No. 6,959,112, hereinafter *Wagman* and U.S. Patent No. 5,023,917, hereinafter *Bose et al.*, the independent claims 1, 5, and 9 are amended to include additional features of the master pattern (17) according to the disclosed embodiment.

As described in the amended claims 1, 5, and 9, the master pattern for use in the outer surface-inspecting method and also the outer surface-inspecting apparatus, includes, among other things, classifying respective different edge shapes of said inspection area into nine standard pattern portions involving four corner pattern portions each of which is applied to a respective corner portion of the inspection area and has an L-shaped edge shape, four side pattern portions each of which is applied to a respective side of the inspection area and has a straight edge portion, and a central pattern portion without having an edge portion of the inspection area; moving each of the side pattern portions relative to the inspection view areas along a peripheral portion of the inspection area having the repeated patterns between respective corner pattern portions, so as to be applied to respective matching inspection view areas of the peripheral portion; applying the single central pattern portion to matching of each of the inspection view areas at a central portion

for the central portion surrounded by each of the peripheral portions; and inspecting the outer surface of the inspection area by comparing the standard pattern portions to the view areas corresponding to the classified standard pattern portions.

By constituting the master pattern (17) with nine standard pattern portions (17a-17d), in the rectangular inspection area (16), the master pattern can be constituted by the nine standard pattern portions (17a-17d) irrespective of any increase in the size of inspection area (16) caused, for example, by magnification of the image of the inspection area. Therefore, by preparing the nine standard pattern portions (17a-17i), an effective outer surface-inspection can be conducted regardless of the size of the inspection area (16), if such a master pattern (17) is used for the outer surface-inspection and also in the outer surface-inspecting apparatus.

In addition, according to the outer surface-inspecting method and the outer surface-inspecting apparatus of the present invention, the standard pattern portion having the same edge shape is used as a master pattern for each side portion showing the same edge shape at the peripheral edge portion of the inspection area (16). Since the standard pattern portions (17a-17i) are used corresponding to the respective edge shapes (16a-16i) of the inspection areas, different standard patterns need not be prepared for the divided inspection view areas, respectively. Thus, the outer surface can effectively inspected, by the standard pattern portions (17a-17i) in a number smaller than that of the view areas, without needing such severe alignment as to prevent the erroneous judgment, therefore without causing the erroneous judgment.

However, the present invention is not limited to the disclosed embodiments.

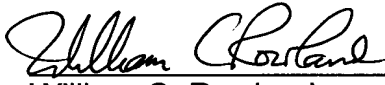
The above-described features are not disclosed in the cited references *Wagman* and *Bose*. The above-described technical effects of the present invention can not be achieved by the inventions disclosed in the cited references, *Wagman* and *Bose et al.*. Therefore, we believe that the present invention significantly differs from the inventions described in the cited references, *Wagman* and *Bose et al.*, in the structure and technical effects, and is not easily based on the technical matters set forth in the cited references *Wagman* and *Bose et al.*

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 7, 2008

By: 
William C. Rowland
Registration No. 30888

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620